

Titanium Dioxide Production



Proposed Rule: Mandatory Reporting of Greenhouse Gases

Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, owners or operators of facilities that contain titanium dioxide production processes (as defined below) would report emissions from titanium dioxide production and all other source categories located at the facility for which methods are defined in the rule. Owners or operators would collect emission data; calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting.

How Is This Source Category Defined?

Under the proposal, the titanium dioxide production source category consists of any facility that uses the chloride process to produce titanium dioxide.

What GHGs Would Be Reported?

The proposal calls for each titanium dioxide production facility to report carbon dioxide (CO₂) process emissions from each chloride process line.

In addition, each facility would report GHG emissions for other source categories for which calculation methods are provided in the rule. For example, facilities would report CO₂, nitrous oxide (N₂O), and methane (CH₄) emissions from each stationary combustion unit on site by following the requirements of 40 CFR part 98, subpart C (General Stationary Fuel Combustion Sources). Please refer to the relevant information sheet for a summary of the proposal for calculating and reporting emissions from any other source categories at the facility.

How Would GHG Emissions Be Calculated?

Under the proposal, owners or operators of titanium dioxide production facilities would calculate CO₂ process emissions using one of two methods, as appropriate:

- Facilities with certain types of continuous emissions monitors (CEMS) in place would report using the CEMS and follow the methodology of 40 CFR part 98, subpart C to report total CO₂ emissions from calcination and fuel combustion. At other facilities, the use of CEMS would be optional.
- Facilities without CEMS would calculate the process CO₂ emissions using the equation provided in the rule and monthly determination of the mass of calcined petroleum coke consumed in each line. Petroleum coke consumption would be determined by either direct measurement or purchase records.

What Information Would Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the proposal calls for each annual report to include the following information for each titanium dioxide production line:

This document was developed for the *Proposed* Mandatory GHG Reporting Rule. For the final document, please visit the *final* [Mandatory Reporting of Greenhouse Gases Rule](#).

- Annual CO₂ emissions from each chloride process line (metric tons).
- Monthly measurements of calcined petroleum coke consumption (metric tons).
- Monthly production of titanium dioxide (metric tons).
- Monthly production capacity of titanium dioxide (metric tons).
- Annual operating hours for each titanium dioxide process line.

Facilities that use CEMS should also report the data specified in 40 CFR 98.34(d) of subpart C (General Stationary Fuel Combustion Sources).

For More Information

This series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the proposed rule. However, these information sheets are not intended to be a substitution for the rule. Visit EPA's Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including the proposed preamble and rule and additional information sheets on specific industries, or go to www.regulations.gov to access the rulemaking docket (EPA-HQ OAR-2008-0508). For questions that cannot be answered through the Web site or docket, call 1-877-GHG-1188.